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| APPLICATION NO.                         | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO.        |  |
|---|-----------------|----------------------|------------------------|-------------------------|--|
| 10/633,419                              | 08/04/2003      | Naoya Nakanishi      | SNY-037                | SNY-037 2557            |  |
| 20374                                   | 7590 11/21/2006 |                      | EXAMINER               |                         |  |
| <del></del>                             | K & KUBOVCIK    | CREPEAU, JONATHAN    |                        |                         |  |
| SUITE 710<br>900 17TH ST                | FREET NW        |                      | ART UNIT               | PAPER NUMBER            |  |
| , | ON, DC 20006    | •                    | 1745                   |                         |  |
|   |                 |                      | DATE MAILED: 11/21/200 | DATE MAILED: 11/21/2006 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| <del></del> -  | · · · · · · · · · · · · · · · · · · ·   | Application No.   | Applicant(s)   |             |
|--|---|---|--|-------------|
| Office Action Summary                                |   | 10/633,419  | NAKANISHI ET AL.   |             |
|  |   | Examiner  | Art Unit   |             |
|  |   | Jonathan S. Crepeau   | 1745   |             |
|  | The MAILING DATE of this communication app  | <u> </u>  | e correspondence addres  | is          |
| Period fo  | or Reply  |   |  |             |
| WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Donsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period vire to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS for a cause the application to become ABANDO | ON.  timely filed  om the mailing date of this communities  NED (35 U.S.C. § 133). |             |
| Status   |   |   |  |             |
| 1) 又   | Responsive to communication(s) filed on <u>25 S</u>   | eptember 2006.  |  |             |
|  |   | action is non-final.  |  |             |
| 3)□  | Since this application is in condition for allowar  | nce except for formal matters, p  | prosecution as to the me   | rits is     |
|  | closed in accordance with the practice under E  | Ex parte Quayle, 1935 C.D. 11,  | 453 O.G. 213.  |             |
| Disposit   | ion of Claims   |   |  |             |
| 4)⊠  | Claim(s) 1-12 is/are pending in the application.  |   |  |             |
| •  | 4a) Of the above claim(s) is/are withdraw   |   |  |             |
| 5)[  | Claim(s) is/are allowed.  |   |  |             |
| 6)⊠  | Claim(s) 1-12 is/are rejected.  |   |  |             |
| 7)   | Claim(s) is/are objected to.  |   |  |             |
| 8)□  | Claim(s) are subject to restriction and/o   | r election requirement.   |  |             |
| Applicati  | ion Papers  |   |  |             |
| 9)[  | The specification is objected to by the Examine   | r.  |  |             |
| 10)  | The drawing(s) filed on is/are: a) ☐ acc  | epted or b) objected to by the  | e Examiner.  |             |
|  | Applicant may not request that any objection to the   | drawing(s) be held in abeyance. S   | See 37 CFR 1.85(a).  |             |
| _  | Replacement drawing sheet(s) including the correct  |   |  |             |
| 11)[   | The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | ce Action or form PTO-1  | <b>52</b> . |
| Priority ι   | under 35 U.S.C. § 119   |   |  |             |
| 12)  | Acknowledgment is made of a claim for foreign   | priority under 35 U.S.C. § 119  | (a)-(d) or (f).  |             |
| a)   | ☐ All b)☐ Some * c)☐ None of:   |   |  | •           |
|  | 1. Certified copies of the priority documents   |   |  |             |
|  | 2. Certified copies of the priority documents   |   |  |             |
|  | 3. Copies of the certified copies of the prior  | •   | ived in this National Stag   | je          |
| * 0  | application from the International Bureau<br>See the attached detailed Office action for a list   |   | wed  |             |
|  | see the attached detailed Office action for a list  | or the certified copies flot fecel  | veu.   |             |
|  |   |   |  |             |
| Attachmen  |   | . <u>_</u>  |  |             |
|  | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)   | 4) Interview Summa<br>Paper No(s)/Mail  |  |             |
| 3) 🔲 Infor   | mation Disclosure Statement(s) (PTO/SB/08)  | 5) 🔲 Notice of Informa  |  |             |
| Pape   | r No(s)/Mail Date   | 6) Other:   |  |             |

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#### **DETAILED ACTION**

## Response to Amendment

1. This Office action addresses claims 1-6 and newly added claims 7-12. All of the claims are newly rejected under 35 USC 103 as necessitated by amendment. Accordingly, this action is made final.

## Claim Rejections - 35 USC § 103

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanafusa et al (U.S. Patent 6,531,246) in view of Yamazaki et al (U.S. Patent 6,632,538).

Hanafusa teaches a battery comprising a can (1) and having positive and negative terminals (21, 20). The battery can may be made of aluminum (see col. 8, line 26) or stainless steel (col. 6, line 23). As shown in Figure 7, the terminal 21 is in contact with a coating layer comprising the can material (5). As shown in Figure 15, the terminal 20 is coated with a material (17b) comprising nickel, copper, or aluminum (see col. 11, line 45).

Hanafusa does not expressly teach the base material composition of the terminals as recited in claims 1, 3, and 5.

Yamazaki et al. is directed to a lithium secondary battery. In column 2, line 54, the reference teaches the following:

The tab 59 connected to the positive terminal 55 is a metal tab of Al or a stainless steel, and the tab 60 connected to the negative terminal 56 is a metal tab of Cu, Ni or a stainless steel.

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Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan would be motivated to use aluminum as the positive terminal and stainless steel as the negative terminal of Hanafusa et al. The disclosure of Yamazaki et al. indicates that these are suitable materials for use as positive and negative terminals. The selection of a known material based on its suitability for its intended use has generally been held to be *prima facie* obvious (MPEP §2144.07). Taking terminal 21 of Hanafusa to be the positive terminal and terminal 20 to be the negative terminal, with regard to claim 3, this would result in an aluminum battery can, a stainless steel negative terminal (20), an aluminum positive terminal (21), and a coating layer (17b) of aluminum (see Fig. 15). Regarding claim 5, the can may be stainless steel, the positive terminal (21) would be aluminum, the negative terminal (20) would be stainless steel, and the coating layer on the positive terminal (21) would also be stainless steel (see Fig. 7). As such, the subject matter of claims 1-6 would be rendered obvious.

Regarding claim 7, which recites two batteries connected in series, it would be obvious to connect the batteries of Hanafusa in series to increase the voltage of a single battery. As such, the subject matter of claims 7-12 would also be rendered obvious.

### Response to Arguments

3. Applicant's arguments filed September 25, 2006 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan, can be reached at (571) 272-1292. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jonathan Crepeau Primary Examiner Art Unit 1745 November 15, 2006